

**What Is Claimed Is:**

1. A method for self correcting a pin distortion using a horizontal deflection coil having a neck part, a screen bent part, an extension part connecting the neck part  
5 and the screen bent part and having a horizontal deflection coil installed on an upper and lower sides in an inner periphery of a coil separator of a deflection yoke, for generating horizontal deflection magnetic field, the method comprising the steps of:

generating pincushion at an edge region on a screen by dividing the screen bent part of the horizontal deflection coil into quadrants, respectively, and by extending  
10 an effective electric field length at a specific region of the extension part positioned in a diagonal direction of the screen bent part on each quadrant, closely to a plane in a back of the screen bent part; and

correcting pincushion generated in the above step and self inner pin phenomenon on a middle portion by compensating a whole pincushion of the screen  
15 through control of a deflection controlling circuit of a display set.

2. The method according to claim1, wherein an interval range where the effective electric field length of the horizontal deflection coil is extended, exists within a position angle range of  $28^{\circ}$  -  $42^{\circ}$  with respect to X axis on the divided quadrant of the  
20 screen bent part.

3. The method according to claim 1, wherein an extension length where the effective electric field length is extended with respect to the specific region of the

horizontal deflection coil, exists within a range of 3% - 10% of an electric field length of a whole horizontal deflection coil.

4. A deflection yoke comprising:

5 a coil separator having a screen part positioned on a screen surface of a cathode-ray tube, a rear cover part, a neck part extended from a central surface of the rear cover part and combined to an electron gun part of the cathode-ray tube;

a vertical deflection coil installed on an outer periphery of the coil separator, for generating vertical deflection magnetic field;

10 a horizontal deflection coil having a screen bent part, an extension part, a neck bent part, and installed on an inner periphery of the coil separator, for generating horizontal deflection magnetic field, and changing distortion pattern on a screen corner part by extending an effective electric field length of a specific region of the extension part positioned on a diagonal direction of a front screen bent part when seen from a  
15 screen side, closely to XY plane at a back of the screen bent part; and

a ferrite core installed on an outer periphery of the coil separator, for strengthening deflection magnetic field.

5. The deflection yoke according to claim 4, wherein an interval range where  
20 the effective electric field length of the horizontal deflection coil is extended, exists within a position angle range of  $28^{\circ}$  -  $42^{\circ}$  with respect to X axis on the divided quadrant of the screen bent part.

6. The deflection yoke according to claim 4, wherein an extension length

where the effective electric field length is extended with respect to the specific region of the horizontal deflection coil, exists within a range of 3% - 10% of an electric field length of a whole coil.